

WHAT IS CLAIMED IS:

1. An iris recognition camera, comprising:
 - a driving barrel configured to support a lens;
 - a moving unit configured to reciprocatingly move the driving barrel to perform both focus and zoom operations; and
 - a position sensor configured to detect a position of the driving barrel.
2. The iris recognition sensor according to claim 1, wherein the moving unit comprises:
 - a motor;
 - a lead screw connected to the motor at one end; and
 - a rack coupled to an outer circumference of the lead screw.
3. The iris recognition camera according to claim 2, wherein the motor comprises a step motor.
4. The iris recognition camera according to claim 1, wherein the driving barrel is provided at one side with a detecting portion configured to communicate with the position sensor so that the position sensor detects a position of the driving barrel.
5. The iris recognition camera according to claim 1, wherein the lens comprises a wide-angle lens.

6. The iris recognition camera according to claim 5, wherein the wide-angle lens has a focusing distance of about 11.8 ± 1 mm.

7. The iris recognition camera according to claim 1, further comprising one or more guide bars configured to guide the driving barrel during reciprocating movement.

8. The iris recognition camera according to claim 7, wherein the one or more guide bars comprises a pair of guide bars, respectively, positioned on opposite sides of the driving barrel.

9. The iris recognition camera according to claim 1, wherein the position sensor is positioned behind the lens.

10. The iris recognition camera according to claim 1, wherein the lens has an image pickup distance range of about 20-70 cm.

11. The iris recognition camera according to claim 1, wherein the position sensor comprises one of an optical sensor and a contact sensor.

12. An iris recognition system comprising the iris recognition camera of claim 1.

13. An iris recognition camera, comprising:
a step motor configured to provide an accurate rotating amount;
a driving barrel configured to be reciprocated by a rotational force transmitted from the step motor; and
a wide-angle lens positioned on the driving barrel and configured to allow a user's image to be captured by moving the driving barrel to an appropriate image pickup location for the user.
14. The camera according to claim 13, wherein the wide-angle lens has an image pickup distance range of about 20-70 cm.
15. The iris recognition camera according to claim 13, further comprising an image pickup device configured to perform the image pickup using light refracted by the wide-angle lens.
16. An iris recognition system comprising the iris recognition camera of claim 13.
17. An iris recognition camera, comprising:
a driving motor;
a wide-angle lens configured to be reciprocated by power transmitted from the driving motor and having a focusing distance of about 11.8 ± 1 mm; and

an image pickup device configured to convert light refracted by the wide-angle lens into an image of a user's iris.

18. The iris recognition camera according to claim 17, wherein an image pickup range of the wide-angle lens is about 20-70 cm.

19. An iris recognition system comprising the iris recognition camera of claim 17.

20. A method of operation for an iris recognition camera, comprising:
detecting a user;
moving a camera lens to an initial position detected by a position sensor after the position sensor detects the user;
moving the camera lens to an image pickup location where a user's iris can be captured; and
performing the image pickup using an image pickup device.

21. The method according to claim 20, wherein the camera lens comprises a wide-angle lens.

22. The method according to claim 20, wherein the image pickup device comprises a charge-coupled device.

23. The method according to claim 20, wherein the iris recognition camera comprises a driving source for moving the lens in the form of a step motor.

24. The method according to claim 20, wherein the iris recognition camera further comprises a power transmission configured to transmit power for moving the camera lens.

25. The method according to claim 24, wherein the power transmission device includes a lead screw configured to be rotated by power from a driving source, and rack screw-coupled to an outer circumference of lead screw.

26. A method of operation for an iris recognition camera, comprising:
turning on power of an iris recognition camera;
moving a lens to an initial position;
detecting a user;
capturing an iris image of the user by moving the lens to a location where the iris image is focused; and
storing a current location of the lens.

27. The method according to claim 26, wherein the initial position is detected by a position sensor.

28. The method according to claim 26, further comprising:
- comparing, when a new user is detected, the current location of the lens with an appropriate location for the lens for the new user;
 - calculating a difference between the current location and the appropriate location; and
 - moving the lens by the calculated difference to perform the image pickup.
29. The method according to claim 26, wherein the lens comprises a wide-angle lens.